

Date of Deposit: May 11, 2007

Our Case No. 068550/0105

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
Michael Hollerman, et al.)	
Serial No.: 09/912,709)	Examiner: Daniel Kesack
Filing Date: July 25, 2001)	Group Art Unit No.: 3691
For: System And Method For)	
Displaying Option Market)	
Information)	

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner for Patents
Washington, D.C. 20231

Sir:

1. We, Michael Hollerman, Joseph Hernandez, J. Brad Peek, Rajesh Aery, Hua Chen, Susan DiMagno, do declare and state:
2. We are the inventors of claims 1-178 of the above-identified application.
3. The project charter dated June 22, 2000, attached hereto as Exhibit 1, was prepared with our direct input and under our direct guidance. All work and associated writings, including the email correspondence attached hereto as Exhibit 2, were carried out in Chicago, Illinois.
4. All dates on the attached exhibits have been masked unless otherwise stated herein by reference to specific dates.

5. Prior to September 13, 2000, we conceived of and completed the invention as described and claimed in the above-identified application, as evidenced by the following:

a. Figure 1 of the project charter attached as Exhibit 1 corresponds to Figure 1 of the above-identified application.

i. As shown in Figure 1 of the attached project charter, we, the named inventors of the above-identified application, prepared a network system, known as "Pulse," for providing a secure, reliable, timely pathway for transmission of option market data to users and members. The network system is a browser based application system. Users or members of the network system access the network system using their own member computers. Each member computer preferably includes a downloaded system applet and a monitor for viewing data. The then recommended configuration for the member computer included a 500 MHz or higher central processing unit, 128 RAM or higher, a 19" monitor with a resolution of 1024x768 or higher, NT 4.0 or Windows 2000, Internet Explorer or Netscape 4.0 or higher with a Java VM installed, and a high speed Internet connection.

ii. As further illustrated in Figure 1 of the attached project charter, the member computer connects via an Internet service provider and the Internet to a member server for login and security processing. Alternatively, the member can use a dedicated line or a modem to directly connect to the first member server. Upon login, the member server

accesses the member database for authentication. Once the user gains entrance to the network system, the system applet connects to at least one second server. The second server requests market data from a Post Data Server (PDS). The second server also holds market data that is retrieved through a session with the PDS. The PDS monitors the list of options displayed on the second server and provides dynamic broadcasts to the second server. The PDS receives market information from a Transaction Processing Facility (TPF) through a Host GateWay (HW). The network system can include a hot backup PDS, so that, in the event of a PDS outage, the second server can be configured to log onto a backup PDS without any noticeable disruption to the user.

b. As stated in the attached project charter, the invention included the development of a new application that runs within a browser as an applet window. Exchange members would access the system by logging into the exchange's member site. Option class display page functionality is supported and a snap quote function for request retrieval of series information was described.

c. As further stated in the attached project charter, once the user has gained entrance through the member site, the applet will connect to a Pulse Server. The Pulse server holds market data that is retrieved through a session with a PDS server (*See Figure 1 - CBOE Pulse Architecture*). The PDS keeps a list of the series that the Pulse Server is displaying and provides dynamic

broadcasts to the Pulse server. The PDS server has a hot backup. In case of a PDS server outage, the Pulse server will log onto a backup PDS server without any noticeable disruption to the user.

d. As additionally stated in the attached project charter, the broadcast messages sent from PDS to the Pulse server contain a bid and ask size field. The Pulse client application accepts the new broadcast message and to display the new bid and ask size fields.

e. As further stated in the attached project charter, the PDS server stores limit book orders for series that are tagged by the Pulse Server. The Pulse Server requests the book orders for the Post Data Server for a specific series.

6. The named inventors worked on the subject matter of the above-identified application continuously from prior to September 13, 2000 until the subsequent actual reduction to practice of the invention disclosed therein, as evidenced by the following:

a. Email correspondence including at least one of the named inventors of the above-identified application dated November 2, 2000 stating that the system was operational and actually reduced to practice as of November 2, 2000.

b. Email correspondence including at least one of the named inventors of the above-identified application dated October 30-31, 2000 indicating that work was being done on the subject matter of the above-identified application.

c. Email correspondence including at least one of the named inventors of the above-identified application dated September 5-12, 2000 indicating that work was being done on the subject matter of the above-identified application.

d. Email correspondence including at least one of the named inventors of the above-identified application dated September 7, 2000 indicating that weekly status meetings occurred between September 1, 2000 and October 27, 2000 to discuss work that was being done on the subject matter of the above-identified application.

e. Email correspondence including at least one of the named inventors of the above-identified application dated August 31, 2000 indicating that work was being done on the subject matter of the above-identified application.

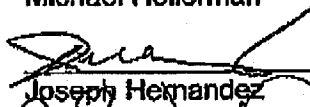
f. Email correspondence including at least one of the named inventors of the above-identified application dated August 14, 2000 indicating that work was being done on the subject matter of the above-identified application.

g. Email correspondence including at least one of the named inventors of the above-identified application dated June 26-27, 2000 indicating that work was being done on the subject matter of the above-identified application.

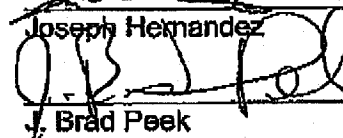
I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18, Section 1001 of the United States Code and that such willful false statements may jeopardize the validity of any United States Letters Patent resulting from the above-captioned United States patent application.

Date: 4-30-07

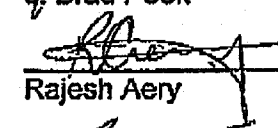
Michael Hollerman

Date: 04/11/07

Joseph Hernandez

Date: 04/05/07

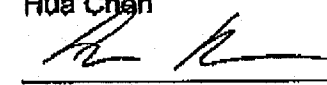
J. Brad Peek

Date: 04/05/07

Rajesh Aery

Date: 04/05/07

Hua Chen

Date: 05/09/07

Susan DiMagno

SYSTEMS DIVISION

PROJECT CHARTER

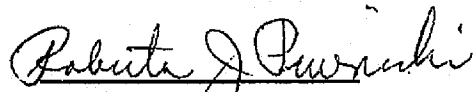
CBOE Pulse

Document #2134

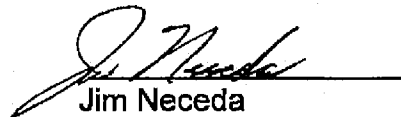
WR #2134

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CBOE Pulse PROJECT CHARTER

1 Goal

The goal of the CBOE Pulse Project is to provide a secure, reliable, timely pathway for transmission of CBOE market data.

2 Objective

The objective for the CBOE Pulse Project is to create a browser-based application that displays intra-day quotes and top of the book. The applet will be accessible only to CBOE members via the CBOE members web site. A later phase will add bid and ask size, book depth, and display of Screen-based trading information.

3 Business Case

CBOE is developing CBOE Pulse in order to respond to competitive business drivers. The International Securities Exchange (ISE) is directly disseminating market data to their members. CBOE Pulse will directly disseminate our market data to our members. As soon as CBOE internal systems are ready to begin sending quotes with size, we will include this data in the CBOE Pulse application. We will not be dependent upon OPRA's readiness to accept a size field for bid and ask quote dissemination.

Developing CBOE Pulse enables us to bypass any OPRA queues that may occur during times of heavy volume. During times of peak quote traffic, OPRA is unable to handle throughput adequately. This results in message queues and consequently stale quotes. Stale quotes misrepresent the CBOE market to the customer and trading desks as well. Although the capacity problem is on OPRA's end and not ours, the result is still an adverse one for CBOE. Disseminating our quotes directly to our members would circumvent this situation.

4 Strategy

An initial set of CBOE Pulse functions will be developed in Phase 1, in advance of functions which require more significant TPF work.

4.1 Phase 1

The following functions are planned for Phase 1.

- Database connectivity to the member's site will limit login and number of browser per member
- Request for a snap quote. Input will require a symbol, an expiration month, and a strike price. Both call and put data will be returned. This function is a request-by-request retrieval. It does not update dynamically.

- Request for standard class display page like the WDN. Underlying ticker and recap broadcast are displayed at the bottom of the class display page. The first page will be returned if the user does not enter a page number. All other pages can be accessed from this point with up and down arrow keys.

4.2 Phase 2

The following functions are planned for Phase 2.

- Provide the limit book depth for a series.
- Provide a bid and ask size for each quote.
- Create a quote montage configurator.
- Using the configurator, allow different class/series data to be displayed in a single window.
- Other functions requested via member feedback.

4.3 Phase 3

The following function is planned for Phase 3.

- Connect CBOE Pulse to SBT API to disseminate SBT information.

5 Tactics

1. The Web development team will develop the Phase I functionality.
2. Simulator tools to emulate client requests and broadcasts from the Pulse server to the Post Data Server(PDS) will be developed. These tools are essential to creating traffic that will be used to performance test the PULSE application.
3. The Phase I application will be made available to an initial set of member firms which were requestors of this project.
4. The application will be made available to all members.

6 Project Scope and Approach

6.1 Scope – Phase I

This project's scope will be limited to the development of a new CBOE Pulse application that runs within a browser as an applet window. Approximately 200 CBOE members will access CBOE Pulse by logging into the CBOE member site. The number of applet windows that each member can open will be limited. This will be determined during performance testing. Only current class display page functionality will be supported and a snap quote function for request retrieval of series information will be developed.

Web Development

- Create a JAVA applet that supports snap quote, standard class display page and sliding underlying ticker and recap.

- Create a CBOE Pulse server application that is responsible for user validation, security, and broadcast update functionality.
- Create simulator tools that will emulate client requests and broadcast updates from the Post Data Server to the CBOE Pulse server.

6.2 Scope – Phase II

Web Development

- Create a configurator tool that provides capability for the user to create a series montage display.
- Modify CBOE Pulse client to display limit orders (book depth) for a series.
- Modify CBOE Pulse client to display bid and ask sizes.

TPF Development

- Create a limit order service that will transmit all limit orders for a requested class.

Server Development

- Create a limit order process to receive limit orders from TPF and store them in a local database.
- Create limit order broadcast process to transmit limit orders to CBOE Pulse client for display.

6.3 Approach

CBOE Pulse will use the current CBOE Internet server for login and security processing. An additional hot backup to the CBOE Internet server will be implemented. This will provide system redundancy for the current Internet server. The other CBOE Pulse components will be deployed on a new infrastructure built upon the PDS-RCN architecture. This architecture offers reliability, redundancy, and reuse of programming code.

Once the user has gained entrance through the CBOE member site, the CBOE Pulse applet will connect to a load balancer which in turn will en-route the request to the appropriate and available CBOE Pulse Server. The CBOE Pulse server holds market data that is retrieved through a session with a PDS server (*See Figure 1 CBOE Pulse Environment*). The PDS will keep a list of the series that the CBOE Pulse Server is displaying and will provide dynamic broadcasts to the CBOE Pulse server. The PDS server will have a hot backup. In case of a PDS server outage, the CBOE Pulse server will log onto a backup PDS server without any noticeable disruption to the user.

The following approach has been proposed for Phase II of CBOE Pulse project. Under WR2037, Quotes With Size, internal CBOE systems will be modified to include a bid and ask size field. After this work is complete, the broadcast messages sent from PDS to the Pulse server will contain a bid and ask size field.

The Pulse client application will be modified to accept the new broadcast message and to display the new bid and ask size fields.

To deploy the display of book depth, the PDS server will be modified to store limit book orders for series that are tagged by the CBOE Pulse Server. TPF will develop a limit book service that will transmit limit book orders to PDS through the Host Gateway. The Pulse Server will request the book orders for the Post Data Server for a specific series.

CBOE Members' Site Pulse System Architecture

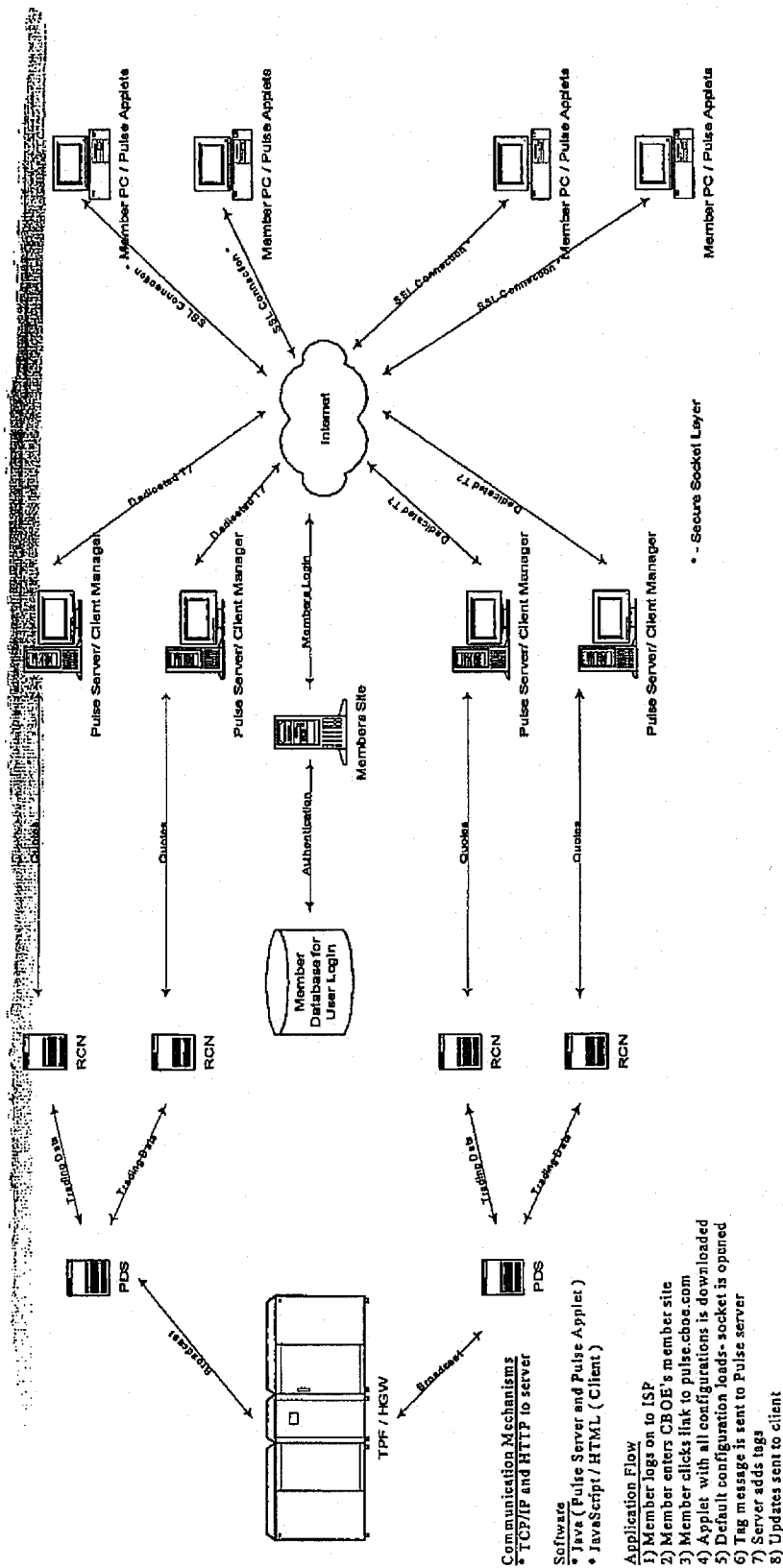


Figure 1 -CBOE Pulse Architecture

7 Assumptions

- Only members with a CBOE assigned login and password will have access to the CBOE Pulse application.
- Transmitting market data directly to our member is the same as what ISE is doing and does not violate the OPRA agreement.

8 Risk/Exposure

The risk related to size and structures are moderate, and the technology risk is small. One department will be involved in the development and testing for Phase I. The new system will interface with one other existing system.

The main area of exposure is the timeliness of the market data. Market data delivery options are an Internet Service Provider (ISP) or , for a more deterministic configuration, using a leased line. This will be evaluated during performance testing and CBOE will provide connectivity requirements and recommendations.

9 Cost/Benefit Analysis

9.1 Costs

The total estimated one-time costs for the CBOE Pulse project Phase I as described above are as follows:

PHASE I

	Cost
PC hardware, software and cabling	\$1,091,200
Development @ 8K/MM(Web 6MM)	\$48,000
Consultants @16K/MM(6M)	\$96,000
Total Installation	\$1,235,200

The details for the above are in Appendix I, Hardware & Software Costs.

The estimated one-time costs for the CBOE Pulse Project Phase II as described above are as follows:

PHASE II

	Man Months	Cost
TPF APPLICATIONS	7	56,000
WEB DEVELOPMENT		
SERVER APPLICATIONS	8	64,000
TOTALS		

Annual On-Going Costs

The annual on-going costs are in Appendix A. The estimated on-going costs are \$163,680 per year. Current Systems personnel will provide support.

9.2 Benefits

The major benefit is that members will have the ability to view CBOE market data independently of any external vendor source. This eliminates any transmission delays that are a result of sending data through multiple data centers. Additionally new types of data can be made available to our members without any dependency upon the readiness of outside vendors to receive them.

10 Environmental Analysis

10.1 Platform

Initial access to the CBOE Pulse application requires each CBOE member to have a browser and an Internet Service Provider to connect to the CBOE member's site. CBOE will provide requirements and recommendations for the hardware, bandwidth, and software use of Pulse.

10.2 Performance Impact

The current internet infrastructure will incur an increase in network traffic as a result of the CBOE Pulse project. The network software group will need to monitor the affect of the additional network traffic on bandwidth, the firewalls, routers, and load balances. The current fractional T3 line to PSI will need to be upgraded to accommodate the increase in data from CBOE Pulse.

Capacity testing has shown that the Oracle server and database used by Web applications can handle the additional activity generated by CBOE Pulse. There are no anticipated performance problems with the Oracle database or its server.

11 Schedule and Dependency Constraints

The quoting with size functionality is dependent upon TPF changes being implemented for *WR #2037 Quoting With Size*. Displaying book depth on CBOE Pulse is dependent upon TPF and Post Data Server modifications. Phase II priority will have to be determined with other competing TPF and Server project priorities.

Phase III functionality is dependent upon the roll-out of the Screen-based Trading Project..

12 Resource Skill Needs

In-house resources have the skills necessary to complete the CBOE Pulse Project.

13 Product Research

No further investigation of products or vendors will be necessary to complete the CBOE Pulse Project.

14 APPENDIX I - HARDWARE & SOFTWARE COSTS

Description	Qty.	Unit Cost	Cost	On-Going Expense
Unix HP Server	1	100,000	100,000	15,000
Oracle Database Software	1	295,000	295,000	44,250
Routers	2	15,000	30,000	4,500
Load Balancing Software/Hardware	2	30,000	60,000	9,000
Performance/Monitoring Tools	1	64,000	64,000	9,600
NT Servers	10	12,000	120,000	18,000
Storage (90 gig)	1	63,000	63,000	9,450
H80 Unix Servers	2	70,000	140,000	21,000
SUN 22 or Unix Servers	4	20,000	80,000	12,000
Microsoft Software	1	35,000	35,000	5,250
Internet Development Software	1	104,200	104,200	15,630
TOTAL CBOE Pulse Development Costs			\$1,091,200	\$163,680

Newmark, Jordan

From: Lim, Ying
Sent: Thursday, November 02, 2000 10:36 AM
To: Aery, Raj
Subject: RE: Final java files for applet

One more thing Sir,

Are these the jars, which got roll-out?
Pulse.jar dated Nov 01 size 76995
PulseServer.jar dated Oct 31 size 355455

If so, I will check them into the version control app and labeled them as Pulse_0.01. Thanks.

Ying

-----Original Message-----

From: Aery, Raj
Sent: Thursday, November 02, 2000 9:26 AM
To: Lim, Ying
Subject: RE: Final java files for applet

We are in production as of this morning. We should label this build version 0.01. Thanks for all your help.

Raj.

-----Original Message-----

From: Lim, Ying
Sent: Thursday, November 02, 2000 9:23 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Could you please provide us the latest status of this project? Thanks.

-----Original Message-----

From: Aery, Raj
Sent: Tuesday, October 31, 2000 1:52 PM
To: Lim, Ying
Cc: Elliott, Sandy; Chen, Hua; Peek, Brad; Hernandez, Joe
Subject: RE: Final java files for applet

Ying,

We are ready to have the Pulse Server build done at your earliest convenience. There will be no need to build the applet.

Thanks,
Raj.

-----Original Message-----

From: Lim, Ying
Sent: Tuesday, October 31, 2000 9:08 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Thanks for the update!

-----Original Message-----

From: Aery, Raj
Sent: Tuesday, October 31, 2000 8:59 AM
To: Lim, Ying
Subject: RE: Final java files for applet

It does not go live today. We will most likely require another build today.

Raj

-----Original Message-----

From: Lim, Ying
Sent: Tuesday, October 31, 2000 8:57 AM
To: Aery, Raj
Subject: FW: Final java files for applet

How was the testing going? Does it go live today?

-----Original Message-----

From: Lim, Ying
Sent: Monday, October 30, 2000 11:22 AM
To: Aery, Raj
Subject: RE: Final java files for applet

Here you go!

-----Original Message-----

From: Aery, Raj
Sent: Monday, October 30, 2000 11:17 AM
To: Lim, Ying
Subject: RE: Final java files for applet

Please send me the jars so I can test them.

-----Original Message-----

From: Lim, Ying
Sent: Monday, October 30, 2000 11:05 AM
To: Aery, Raj
Cc: Elliott, Sandy; Jiang, Xingling; Hernandez, Joe; Chen, Hua; Peek, Brad; Meagher, Wally; Sidlo, Alan; Monjarro, Al
Subject: RE: Final java files for applet

Raj,

I could now build the applet using the ClearCase sources--thanks for your help. In case you are interested in knowing what the problem was--it was due to the environment differences in between the PATH, which was defined under the DOS batch file and the clearmake Make file.

I finished recompiling Pulse.jar (with the scrambled version) along with PulseServer.jar (just to ensure we got the latest copy) after re-importing the latest sources into ClearCase. They both built fine. I went ahead and loaded these jars onto both interpulse1 and interpulse2 servers under \pulseqa. Let us know when we can co-ordinate with EUC to propagate the files onto the production directories. Thanks.

Ying

-----Original Message-----

From: Aery, Raj
Sent: Monday, October 30, 2000 9:47 AM
To: Lim, Ying
Cc: Elliott, Sandy; Jiang, Xingling; Hernandez, Joe; Chen, Hua; Peek, Brad
Subject: Final java files for applet

Ying,

I have put the scrambled version of the applet in SS under Pulse\Applet\Final. These are the source files that we should be using for production. The packages are the same as the non-scrambled version, which are under Pulse\Applet\Src. There should be no changes necessary for the make file.

Let me know if you have any questions.

Thanks,
Raj.

Newmark, Jordan

From: Chen, Hua
Sent: Tuesday, September 12, 2000 1:47 PM
To: 'lowtherk@tsainc.com'
Cc: Aery, Raj; Peek, Brad; Hernandez, Joe
Subject: RE: Two questions

Ken,

For suspending user issue, I forwarded your question to Brad and Rebecca. I will let you know the result later.

For the Admin functionality for a user, you are right, it can be either way. I think the detail view has more info of a user so that's the reason I put it there. Also, I agree with you the applet should not update the command buttons every time an user is selected. So the command buttons should not be updated for each user selection, but they belongs to detail view.

Let me know if you need more info on this.

Thanks,

Hua

-----Original Message-----

From: lowtherk@tsainc.com [mailto:lowtherk@tsainc.com]
Sent: Tuesday, September 12, 2000 1:03 PM
To: chenh@cboe.com
Subject: Two questions

Hua,

When we stop allowing connections for a user (Admin Member Info Display), I have made the following assumptions and I want to check them with you. If it's not this, please let me know what it should be:

Toggles the approved status flag in the database. If the user is approved the status becomes suspended, likewise if the status is suspended it becomes approved. If the status is not approved, then no action can be taken and an error message will be returned.

Also, it seems like the functionality listed in the Admin Member Info Display detail view could be put into the Master View except for the Close Specific User connection. Is there a reason it is not? It just seems to make more sense that way, since any selection in the detail is going to do something with the same user every time. I hope this is clear enough.

Thanks,

Ken

Newmark, Jordan

From: Chen, Hua
Sent: Tuesday, September 12, 2000 8:31 AM
To: 'lowtherk@tsainc.com'; 'SuiterM@tsainc.com'
Cc: Hernandez, Joe; Aery, Raj; Peek, Brad
Subject: RE: Phone conversation recap

Ken and Mike,

I talked with Raj. We agree to use the same port pulse applets using to connect to PulseServer for Monitor applets. The port number is 8000. Because we will open the port any way for the pulse applets. So using port 80 is no more a requirement for Monitor Applets.

Thanks,

Hua

-----Original Message-----

From: lowtherk@tsainc.com [mailto:lowtherk@tsainc.com]
Sent: Monday, September 11, 2000 2:30 PM
To: chenh@cboe.com
Cc: SuiterM@tsainc.com
Subject: Phone conversation recap

Here is a recap of our phone conversation from earlier this afternoon (09/10/2000). Please notify me of any omissions, inconsistencies or questions you may have.

Mike and I called Hua to discuss the usage of an ASP between the MonitorApplet and the PulseMonitor. Hua explained that the ASP should act as a pass through that the MonitorApplet connects to via port 80 on the web server. The ASP will receive the message and connect to the PulseMonitor, forwarding the message from the MonitorApplet. The return message would come back the same way it was sent, via the ASP, then back to the MonitorApplet. Mike mentioned that this was the first time this had been requested and Hua agreed that it was new. Hua suggested the possibility of using ISAPI to implement the underlying socket connection, since ASP doesn't have socket connections built in. Mike mentioned that third party software was available at serverobjects.com for only \$50, which would cost much less than the development time involved in creating the socket. We offered to look into the option for Hua and he agreed.

The conversation ended with the agreement that this development would delay the project for at least several days. All agreed that it would be better to run on another port for Phase One until running with the web server could be worked out. Hua mentioned using an unused FTP port for temporary purposes.

Ken

Newmark, Jordan

From: Peek, Brad
Sent: Monday, September 11, 2000 8:01 AM
To: Athanas, Nick
Subject: decimal question

Nick,

I added code to determine if a price was in decimal, I don't know if this will make sense to you. But, our original code in JPrice (from the TNT code base) gets the price and the "scale". What I do is check if the scale is 0x0f. If it is I treat it as a fraction, otherwise as a decimal.

Any thoughts?

me

p.s. Linda wanted to get together for lunch awhile ago. You hear anything new?

J. Brad Peek
office: 312.786.7237
pager: 312.839.1232
email: peekb@cboe.com

Newmark, Jordan

From: Peek, Brad
Sent: Monday, September 11, 2000 7:03 AM
To: Aery, Raj; Chen, Hua
Subject: FW: PDS message rates

If either of you are interested, feel free to schedule a meeting with Tom

;-)

-----Original Message-----

From: Etheridge, Tom
Sent: Saturday, September 09, 2000 4:25 PM
To: Peek, Brad
Subject: RE: PDS message rates

Brad,

I suggest you schedule a meeting with me to discuss the limitations of the RCN application as it relates to non-post specific configurations. The problems PULSE will run into are not related to message rates, but rather cumulative class downloads over the course of the day.

TKE...

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 10:00 AM
To: Etheridge, Tom
Subject: FW: PDS message rates

Tom,

Would you have numbers related to the questions below?

Thanks!

Brad

-----Original Message-----

From: Athanas, Nick
Sent: Friday, September 08, 2000 9:52 AM
To: Peek, Brad
Subject: RE: PDS message rates

The best person to talk to about this is Tom Etheridge. Whatever he tells you though will be obsolete after I load my PDSServer and RCNserver critical next week after expiration.
Nick

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 9:45 AM
To: Athanas, Nick
Subject: PDS message rates

Nick,

We're doing our perf/systems testing and were wondering

1. What is average message rate between a PDS and RCN?
2. What is the max message rate "" ""?
3. What is max clients attached to any RCN (I think we've asked this before)?

Would you know or could you point me the right direction?

Brad

J. Brad Peek

office: 312.786.7237

pager: 312.839.1232

email: peekb@cboe.com

Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 11:05 AM
To: Strege, John; Paradiso, Dennis; Smith, Jeff; Caldwell, Jeff; Kuehner, Mark; Aery, Raj; Chen, Hua; Peterson, Bob; Deweese, John; Monjarro, Al; Rittner, John; Elliott, Sandy; Gerdes, Linda; Danaher, Matt; Hernandez, Joe; Piwnicki, Bobbie; Schumacher, Curt; Roy, Gautam
Subject: Recap of the Pulse Implementations Tasks meeting, Friday @ 8:30

Below is an update to the Pulse Implementation tasks issues. Updates are in blue.

Thank you everyone for keeping up with all the varying issues related to the Pulse project!

Brad



Outstanding
Tasks.xls

Al Monjarro

#12 Progress report

Purchasing is attempting to replace the order for W2K Server licenses and replace that with an order for 3 W2K Advanced Server licenses.

#13/14 Progress report

In-progress, expected soon.

#41/47/55 Are these actually tasks or should they be removed?

These will be removed.

Jeff Smith

#43 How much time is involved to either move the test servers to the UMDC?

Approximately 1 day.

If the new servers arrive in time, How much time is required to set them up in the UMDC?

Approximately 2 days.

#44 Can this be completed prior to the servers being available?

It is being scheduled.

Mark Kuehner

#45/48 Progress report for the wire pulls being done prior to server installation

Completed.

#62 Progress report on the SSA disk array adapter and network cables and estimated ETA?

Solutions Technologies is ordering the array. Mark will check on a expected delivery date.

Does IBM have to come back for the install?

Solutions Technologies will install.

How much time is required?

A couple of hours.

#58/60 Are the network cables and RCI cables being pulled along with #45/48?

I will find out if the new Monitor server will fit in the same cabinet as the HP 8500s.

#73 When will PDS32 be available on the test network?

Dependant on #62.

How much time is required to move it to production and what is involved?

Several hours between DOSS, Mark Kuehner and Tom Kenny.

Jeff Caldwell

#49 Progress report for this week-end's install

Being rescheduled tentatively for the week-end of Sept 16th. This is predicated on resolving the issue of upgrading the N

class database servers from HP UX 11. to 11.ACE.

John Strege

#53 Do we have an IP for the Monitor server?

Yes, .46 and InterPulse1 and 2 will be .47 and .48.

Accessibility from the OPs area (if not what is involved)?

Yes, on the 3 PCs attached to Corp in the horseshoe.

#63,69 Progress report.

Dependant on #62.

Is 69 actually being done when 63 is completed?

Yes.

#109-121 Progress report

109 - 111 done on Thurs.

112 ordered,

113 - 117 possibly tonight or Monday

118 - 121 status will be covered next Friday.

Dennis Paradiso

#91 How much time is involved?

Should this be done just prior to the Pulse roll-out?

J. Brad Peek

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Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 7:51 AM
To: Hernandez, Joe
Subject: Pulse & Stella

Joe,

Should I ask Jeff Reed to schedule a meeting when Stella is back for an overview of the Pulse schema? Just to give them a heads up?

Brad

1. Brad Peek

office: 312.786.7237
pager: 312.839.1232
email: peekb@cboe.com

Newmark, Jordan

From: Frazier-Runquist, Ginnie
Sent: Thursday, September 07, 2000 2:41 PM
To: IRB Mailing List; Gerdes, Linda; Smith, Eileen; Lee, Roger; Rittner, John
Subject: IRB Minutes for 9/6/00

The following are the minutes from the IRB Meeting held on 9/6/00. IRB Project Status Forms have been updated and are located in o:\document\irb status forms*. Use the status forms to obtain your referee signatures. Prior to your project implementation, the signed status form must be provided to Operations at the 1:00 pm daily meeting or the 9:30 am Friday meeting.

Schedule your project implementation by using the TESTREQ mailing list. Questions, contact Terry Land, Tom Etheridge, or any member of the Q/A Staff.

PROJECT CHARTER:

WORK REQUEST: 2134
PROJECT NAME: CBOE Pulse
SUBMITTED BY: Linda Gerdes

WORK REQUEST: 2190
PROJECT NAME: NSCC Transmission For Exchange Traded Funds
SUBMITTED BY: Eileen Smith

ASSURANCE/IMPLEMENTATION TEST PLANS:

WORK REQUEST: 2187
PROJECT NAME: OS/390 Release 8
SUBMITTED BY: Roger Lee
REFEREES: R. Kupski, S. Elliott, T. Land, E. Horvath, J. Ulowetz

WORK REQUEST: 2221
PROJECT NAME: Prod Routers IOS Upgrade
SUBMITTED BY: John Rittner
REFEREES: J. Strege, T. Etheridge, T. Land, M. Todd, B. Peterson, D. Wegener

Ginnie Runquist :-)

Newmark, Jordan

From: Frazier-Runquist, Ginnie
Sent: Tuesday, September 05, 2000 2:33 PM
To: IRB Mailing List; Rittner, John; Gerdes, Linda; Smith, Eileen; Lee, Roger
Subject: FW: IRB AGENDA FOR 9/6/00 - UPDATE

The item in red will be a walk-in for the 9/6/00 meeting

-----Original Message-----

From: Frazier-Runquist, Ginnie
Sent: Tuesday, September 05, 2000 8:32 AM
To: IRB Mailing List; Lee, Roger; Smith, Eileen; Gerdes, Linda
Subject: IRB AGENDA FOR 9/6/00

The following is the Agenda for the IRB Meeting which will be held on **9/6/00 in lower level conference room, at 9:30 am**. IRB Project Status Forms have been updated and are located in **o:\document\irb status forms***. Use the status forms to obtain your referee signatures. Prior to your project implementation, the signed status form must be provided to Operations at the 1:00 pm daily meeting or the 9:30 am Friday meeting.

Schedule your project implementation by using the TESTREQ mailing list. Questions, contact Terry Land, Tom Etheridge, or any member of the Q/A Staff.

PROJECT CHARTER:

WORK REQUEST: 2134
PROJECT NAME: CBOE Pulse
SUBMITTED BY: Linda Gerdes
O:\document\cboe\2134_CBOE_Pulse\2134pc.doc

WORK REQUEST: 2190
PROJECT NAME: NSCC Transmission For Exchange Traded Funds
SUBMITTED BY: Eileen Smith
O:\document\cboe\2190 NSCC_Transmission_for_Exchange_Traded_Funds\2190pc.doc

WORK REQUEST: 2187
PROJECT NAME: OS/390 Release 8
SUBMITTED BY: Roger Lee
O:\document\cboe\2187_OS_390_Release_8\2187_TP.doc

Work Request: 2221
Project Name: Prod Routers IOS Upgrade
Submitted by: John Rittner
O:\document\cboe\2221_Prod_Routers_IOS_Upgrade\2221TP.doc

Ginnie Runquist :-)

Newmark, Jordan

Subject: Updated: Weekly Pulse Implementation Tasks review
Location: 4A

Start: Fri 9/1/2000 8:30 AM
End: Fri 9/1/2000 9:30 AM
Show Time As: Tentative

Recurrence: Weekly
Recurrence Pattern: every Friday from 8:30 AM to 9:30 AM

Meeting Status: Not yet responded

Required Attendees: Strege, John; Paradiso, Dennis; Smith, Jeff; Caldwell, Jeff; Kuehner, Mark; Aery, Raj; Chen, Hua; Peterson, Bob; Deweese, John; Monjarro, Al; Rittner, John; Elliott, Sandy; Piwnicki, Bobbie; Schumacher, Curt; Roy, Gautam; Conference Room 4A; Gerdes, Linda; Danaher, Matt; Hernandez, Joe; Land, Terry

I added some additional meeting slots to ensure the Friday 8:30 stayed available and also added some attendees

=====

We would like to schedule a weekly meeting to review the status of the Pulse project.

Originally, we had thought that Wednesday would be best to meet. There appears to be too many scheduling conflicts so Friday was chosen. If you cannot attend, some else from your specific areas would be greatly appreciated. An updated spread sheet and recap from last Friday's meeting will follow later today.

Thanks,

Brad

Newmark, Jordan

From: Hollerman, Mike
Sent: Thursday, August 31, 2000 9:30 AM
To: Peek, Brad
Subject: Electronic copies of Pulse screens



SCREEN3.xls

CEDE 8000	MSD JUST	54.170	54.220	54.270	54.320	54.370	54.420	54.470	54.520	54.570	54.620	54.670	54.720	54.770	54.820	54.870	54.920	54.970	55.020	55.070	55.120	55.170	55.220	55.270	55.320	55.370	55.420	55.470	55.520	55.570	55.620	55.670	55.720	55.770	55.820	55.870	55.920	55.970	56.020	56.070	56.120	56.170	56.220	56.270	56.320	56.370	56.420	56.470	56.520	56.570	56.620	56.670	56.720	56.770	56.820	56.870	56.920	56.970	57.020	57.070	57.120	57.170	57.220	57.270	57.320	57.370	57.420	57.470	57.520	57.570	57.620	57.670	57.720	57.770	57.820	57.870	57.920	57.970	58.020	58.070	58.120	58.170	58.220	58.270	58.320	58.370	58.420	58.470	58.520	58.570	58.620	58.670	58.720	58.770	58.820	58.870	58.920	58.970	59.020	59.070	59.120	59.170	59.220	59.270	59.320	59.370	59.420	59.470	59.520	59.570	59.620	59.670	59.720	59.770	59.820	59.870	59.920	59.970	60.020	60.070	60.120	60.170	60.220	60.270	60.320	60.370	60.420	60.470	60.520	60.570	60.620	60.670	60.720	60.770	60.820	60.870	60.920	60.970	61.020	61.070	61.120	61.170	61.220	61.270	61.320	61.370	61.420	61.470	61.520	61.570	61.620	61.670	61.720	61.770	61.820	61.870	61.920	61.970	62.020	62.070	62.120	62.170	62.220	62.270	62.320	62.370	62.420	62.470	62.520	62.570	62.620	62.670	62.720	62.770	62.820	62.870	62.920	62.970	63.020	63.070	63.120	63.170	63.220	63.270	63.320	63.370	63.420	63.470	63.520	63.570	63.620	63.670	63.720	63.770	63.820	63.870	63.920	63.970	64.020	64.070	64.120	64.170	64.220	64.270	64.320	64.370	64.420	64.470	64.520	64.570	64.620	64.670	64.720	64.770	64.820	64.870	64.920	64.970	65.020	65.070	65.120	65.170	65.220	65.270	65.320	65.370	65.420	65.470	65.520	65.570	65.620	65.670	65.720	65.770	65.820	65.870	65.920	65.970	66.020	66.070	66.120	66.170	66.220	66.270	66.320	66.370	66.420	66.470	66.520	66.570	66.620	66.670	66.720	66.770	66.820	66.870	66.920	66.970	67.020	67.070	67.120	67.170	67.220	67.270	67.320	67.370	67.420	67.470	67.520	67.570	67.620	67.670	67.720	67.770	67.820	67.870	67.920	67.970	68.020	68.070	68.120	68.170	68.220	68.270	68.320	68.370	68.420	68.470	68.520	68.570	68.620	68.670	68.720	68.770	68.820	68.870	68.920	68.970	69.020	69.070	69.120	69.170	69.220	69.270	69.320	69.370	69.420	69.470	69.520	69.570	69.620	69.670	69.720	69.770	69.820	69.870	69.920	69.970	70.020	70.070	70.120	70.170	70.220	70.270	70.320	70.370	70.420	70.470	70.520	70.570	70.620	70.670	70.720	70.770	70.820	70.870	70.920	70.970	71.020	71.070	71.120	71.170	71.220	71.270	71.320	71.370	71.420	71.470	71.520	71.570	71.620	71.670	71.720	71.770	71.820	71.870	71.920	71.970	72.020	72.070	72.120	72.170	72.220	72.270	72.320	72.370	72.420	72.470	72.520	72.570	72.620	72.670	72.720	72.770	72.820	72.870	72.920	72.970	73.020	73.070	73.120	73.170	73.220	73.270	73.320	73.370	73.420	73.470	73.520	73.570	73.620	73.670	73.720	73.770	73.820	73.870	73.920	73.970	74.020	74.070	74.120	74.170	74.220	74.270	74.320	74.370	74.420	74.470	74.520	74.570	74.620	74.670	74.720	74.770	74.820	74.870	74.920	74.970	75.020	75.070	75.120	75.170	75.220	75.270	75.320	75.370	75.420	75.470	75.520	75.570	75.620	75.670	75.720	75.770	75.820	75.870	75.920	75.970	76.020	76.070	76.120	76.170	76.220	76.270	76.320	76.370	76.420	76.470	76.520	76.570	76.620	76.670	76.720	76.770	76.820	76.870	76.920	76.970	77.020	77.070	77.120	77.170	77.220	77.270	77.320	77.370	77.420	77.470	77.520	77.570	77.620	77.670	77.720	77.770	77.820	77.870	77.920	77.970	78.020	78.070	78.120	78.170	78.220	78.270	78.320	78.370	78.420	78.470	78.520	78.570	78.620	78.670	78.720	78.770	78.820	78.870	78.920	78.970	79.020	79.070	79.120	79.170	79.220	79.270	79.320	79.370	79.420	79.470	79.520	79.570	79.620	79.670	79.720	79.770	79.820	79.870	79.920	79.970	80.020	80.070	80.120	80.170	80.220	80.270	80.320	80.370	80.420	80.470	80.520	80.570	80.620	80.670	80.720	80.770	80.820	80.870	80.920	80.970	81.020	81.070	81.120	81.170	81.220	81.270	81.320	81.370	81.420	81.470	81.520	81.570	81.620	81.670	81.720	81.770	81.820	81.870	81.920	81.970	82.020	82.070	82.120	82.170	82.220	82.270	82.320	82.370	82.420	82.470	82.520	82.570	82.620	82.670	82.720	82.770	82.820	82.870	82.920	82.970	83.020	83.070	83.120	83.170	83.220	83.270	83.320	83.370	83.420	83.470	83.520	83.570	83.620	83.670	83.720	83.770	83.820	83.870	83.920	83.970	84.020	84.070	84.120	84.170	84.220	84.270	84.320	84.370	84.420	84.470	84.520	84.570	84.620	84.670	84.720	84.770	84.820	84.870	84.920	84.970	85.020	85.070	85.120	85.170	85.220	85.270	85.320	85.370	85.420	85.470	85.520	85.570	85.620	85.670	85.720	85.770	85.820	85.870	85.920	85.970	86.020	86.070	86.120	86.170	86.220	86.270	86.320	86.370	86.420	86.470	86.520	86.570	86.620	86.670	86.720	86.770	86.820	86.870	86.920	86.970	87.020	87.070	87.120	87.170	87.220	87.270	87.320	87.370	87.420	87.470	87.520	87.570	87.620	87.670	87.720	87.770	87.820	87.870	87.920	87.970	88.020	88.070	88.120	88.170	88.220	88.270	88.320	88.370	88.420	88.470	88.520	88.570	88.620	88.670	88.720	88.770	88.820	88.870	88.920	88.970	89.020	89.070	89.120	89.170	89.220	89.270	89.320	89.370	89.420	89.470	89.520	89.570	89.620	89.670	89.720	89.770	89.820	89.870	89.920	89.970	90.020	90.070	90.120	90.170	90.220	90.270	90.320	90.370	90.420	90.470	90.520	90.570	90.620	90.670	90.720	90.770	90.820	90.870	90.920	90.970	91.020	91.070	91.120	91.170	91.220	91.270	91.320	91.370	91.420	91.470	91.520	91.570	91.620	91.670	91.720	91.770	91.820	91.870	91.920	91.970	92.020	92.070	92.120	92.170	92.220	92.270	92.320	92.370	92.420	92.470	92.520	92.570	92.620	92.670	92.720	92.770	92.820	92.870	92.920	92.970	93.020	93.070	93.120	93.170	93.220	93.270	93.320	93.370	93.420	93.470	93.520	93.570	93.620	93.670	93.720	93.770	93.820	93.870	93.920	93.970	94.020	94.070	94.120	94.170	94.220	94.270	94.320	94.370	94.420	94.470	94.520	94.570	94.620	94.670	94.720	94.770	94.820	94.870	94.920	94.970	95.020	95.070	95.120	95.170	95.220	95.270	95.320	95.370	95.420	95.470	95.520	95.570	95.620	95.670	95.720	95.770	95.820	95.870	95.920	95.970	96.020	96.070	96.120	96.170	96.220	96.270	96.320	96.370	96.420	96.470	96.520	96.570	96.620	96.670	96.720	96.770	96.820	96.870	96.920	96.970	97.020	97.070	97.120	97.170	97.220	97.270	97.320	97.370	97.420	97.470	97.520	97.570	97.620	97.670	97.720	97.770	97.820	97.870	97.920	97.970	98.020	98.070	98.120	98.170	98.220	98.270	98.320	98.370	98.420	98.470	98.520	98.570	98.620	98.670	98.720	98.770	98.820	98.870	98.920	98.970	99.020	99.070	99.120	99.170	99.220	99.270	99.320	99.370	99.420	99.470	99.520	99.570	99.620	99.670	99.720	99.770	99.820	99.870	99.920	99.970	100.020	100.070	100.120	100.170	100.220	100.270	100.320	100.370	100.420	100.470	100.520	100.570	100.620	100.670	100.720	100.770	100.820	100.870	100.920	100.970	101.020	101.070	101.120	101.170	101.220	101.270	101.320	101.370	101.420	101.470	101.520	101.570	101.620	101.670	101.720	101.770	101.820	101.870	101.920	101.970	102.020	102.070	102.120	102.170	102.220	102.270	102.320	102.370	102.420	102.470	102.520	102.570	102.620	102.670	102.720	102.770	102.820	102.870	102.920	102.970	103.020	103.070	103.120	103.170	103.220	103.270	103.320	103.370	103.420	103.470	103.520	103.570	103.620	103.670	103.720	103.770	103.820	103.870	103.920	103.970	104.020	104.070	104.120	104.170	104.220	104.270	104.320	104.370	104.420	104.470	104.520	104.570	104.620	104.670	104.720	104.770	104.820	104.870	104.920	104.970	105.020	105.070	105.120	105.170	105.220	105.270	105.320	105.370	105.420	105.470	105.520	105.570	105.620	105.670	105.720	105.770	105.820	105.870	105.920	105.970	106.020	106.070	106.120	106.170	106.220	106.270	106.320	106.370	106.420	106.470	106.520	106.570	106.620	106.670	106.720	106.770	106.820	106.870	106.920	106.970	107.020	107.070	107.120	107.170	107.220	107.270	107.320	107.370	107.420	107.470	107.520	107.570	107.620	107.670	107.720	107.770	107.820	107.870	107.920	107.970	108.020	108.070	108.120	108.170	108.220	108.270	108.320	108.370	108.420	108.470	108.520	108.570	108.620	108.670	108.720	108.770	108.820	108.870	108.920	108.970	109.020	109.070	109.120	109.170	109.220	109.270	109.320	109.370	109.420	109
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[illegible][illegible]

Newmark, Jordan

From: Peek, Brad
Sent: Friday, September 08, 2000 3:13 PM
To: Dillon, Maureen
Subject: RE: HP and cabinets

you are most kind and generous!

;-)

Have a great week-end!

Brad

-----Original Message-----

From: Dillon, Maureen
Sent: Friday, September 08, 2000 3:10 PM
To: Peek, Brad
Subject: RE: HP and cabinets

I gave the question to Comark and they are going to have one of their technical people call you direct. Ok?

-----Original Message-----

From: Peek, Brad
Sent: Friday, September 08, 2000 10:59 AM
To: Dillon, Maureen
Cc: Hernandez, Joe; Aery, Raj; Chen, Hua
Subject: HP and cabinets

Maureen,

I'm wondering if you know who I should contact. We're trying to determine if the Pulse Monitor server that we ordered below can be rack mounted in the same cabinet as the HP 8500 Pulse servers.....

Thanks!

Brad

-----Original Message-----

From: Hernandez, Joe
Sent: Monday, August 14, 2000 1:10 PM
To: Purchasing
Cc: Chen, Hua; Aery, Raj; Peek, Brad
Subject: Monitor Server

Please order the following for the Pulse project to facilitate monitoring of the application servers and statistics.

One HP LPr 2U Unit (3.5 Inches High)
2 x 850 PIII Processors
256 MB Ram
9.1 GB HD
1 SCSI Controller for EMC

I will be on vacation so please direct any questions to either Hua Chen or Raj Aery.

Thank you,
Joseph Hernandez

Newmark, Jordan

From: Kuehner, Mark
Sent: Friday, September 08, 2000 2:37 PM
To: Smolinske, Greg
Cc: Vliet, Matt; Buffano, Ron; Dillon, Maureen; Etheridge, Tom; Peek, Brad
Subject: FW: IBM delivery.

These disk array adapters are part of the IBM H80 server demo mentioned in this email. I do not know of any demo PO # but I need these cards for installation Monday

-----Original Message-----

From: Vliet, Matt
Sent: Tuesday, June 27, 2000 10:25 AM
To: Kuehner, Mark
Subject: FW: IBM delivery.

-----Original Message-----

From: Etheridge, Tom
Sent: Tuesday, June 27, 2000 10:25 AM
To: Schumacher, Curt; Vliet, Matt; Warehouse
Cc: Weyh, Dawn; King, Juanita; Madison, Evelyn; Schumacher, Curt; Buffano, Ron; Vliet, Matt; Strege, John
Subject: RE: IBM delivery.

This is for the H80 Upgrade beta program (which has a loaner PO). This equipment is two internal disks plus a storage drawer. Please deliver this to the CDC on the 2nd floor.

TKE...

-----Original Message-----

From: Schumacher, Curt
Sent: Tuesday, June 27, 2000 9:27 AM
To: Vliet, Matt; Etheridge, Tom
Subject: FW: IBM delivery.

??????????? Is this for the h80 trial

-----Original Message-----

From: Warehouse
Sent: Monday, June 26, 2000 2:12 PM
To: Dillon, Maureen
Cc: Weyh, Dawn; King, Juanita; Madison, Evelyn; Schumacher, Curt; Buffano, Ron
Subject: IBM delivery.

Today, Emery Worldwide delivered one small pallet to Curt's attention. This shipment is from IBM-Singapore and does not list a CBOE PO# (it lists an Order #5181F0018565). The contents are a qty-1 of a 2104 Machine. Please provide a PO# so this can be delivered. Also, does this item need to be tagged for inventory?

Thank you,

Greg Smolinske



FOLEY & LARDNER LLP
VEREX PLAZA
150 EAST GILMAN STREET
MADISON, WI 53703-1481
TELEPHONE (608) 257-5035
FACSIMILE (608) 258-4258
WWW.FOLEY.COM

Deborah A. Belanger
4410 Gray Road
De Forest, WI 53532

Date: May 9, 2007
Our Ref. No.: 046238-0101

Statement of Account

Outstanding Invoices:

Date	Invoice No.	Amount	Credits	Balance
12/9/2005	26109692	\$2,688.69	(\$1,219.68)	\$1,469.01
1/9/2006	26121130	\$14,967.16	\$0.00	\$14,967.16
2/22/2006	27003957	\$684.00	\$0.00	\$684.00
3/10/2006	27011404	\$4,417.81	\$0.00	\$4,417.81
4/12/2006	27023404	\$2,009.00	\$0.00	\$2,009.00
5/11/2006	27035072	\$1,500.07	\$0.00	\$1,500.07
6/22/2006	27050678	\$774.08	\$0.00	\$774.08
3/14/2007	28014211	\$3,973.93	\$0.00	\$3,973.93

Total Balance Outstanding: \$29,795.06

Current Invoice:

Date	Invoice No.	Amount	Credits	Balance
05/09/2007	28035058	\$738.65	\$0.00	\$738.65

Total Amount Due: \$30,533.71

Please reference your account number 046238-0101 and your invoice number 28035058 with your remittance payable to Foley & Lardner LLP.

Foley & Lardner LLP
Federal Employer Number:
39-0473800



FOLEY & LARDNER LLP
VEREX PLAZA
150 EAST GILMAN STREET
MADISON, WI 53703-1481
TELEPHONE (608) 257-5035
FACSIMILE (608) 258-4258
WWW.FOLEY.COM

Deborah A. Belanger
4410 Gray Road
De Forest, WI 53532

Date: May 9, 2007
Invoice No.: 28035058
Our Ref. No.: 046238-0101

Services through
April 30, 2007

Amount due for professional services rendered regarding
POST DIVORCE \$705.00

Total Expenses: \$33.65

Invoice Total: \$738.65

Total Amount Due: \$738.65

Please reference your account number 046238-0101 and your
invoice number 28035058 with your remittance payable to Foley & Lardner
LLP.

Foley & Lardner LLP
Federal Employer Number:
39-0473800

BELANGER, DEBORAH A.
Our Ref. No.: 046238-0101
Invoice No.: 28035058

Page 2
Foley & Lardner LLP
May 9, 2007

Professional Services Detail

3/30/07	MSH	Draft contempt papers.	0.70	\$220.50
4/3/07	ARK	Work on new contempt motion and hearing (billed only .1 hour).	0.10	\$38.50
4/27/07	MSH	Case planning regarding hearing/discovery.	0.20	\$63.00
4/27/07	HMM	Office conference regarding upcoming hearing issues; draft subpoena duces tecum; telephone call with Dane County legal Notice re service of same; draft and send letter to Dane County Legal Notice regarding service of subpoena; have same served.	1.60	\$256.00
4/30/07	MSH	Draft correspondence to court; hearing preparation.	0.20	\$63.00
4/30/07	HMM	Work on issue of service of subpoena.	0.40	\$64.00
Services Total:			3.20	\$705.00

Expenses Incurred

Description	Amount
Photocopying Charges	\$30.60
Color Photocopying Charges	\$3.00
Other Fees	(\$10.00)
Mailing Expense	\$10.05
Expenses Total:	\$33.65

Certain services and expenses, which involve payments made to third parties, include an additional charge based upon our internal costs with respect to those services and expenses.

BELANGER, DEBORAH A.

Our Ref. No.: 046238-0101

Invoice No.: 28035058

Page 3

Foley & Lardner LLP

May 9, 2007

Expense Detail**Photocopying Charges**

03/02/07	17 Copies.	2.55
03/06/07	4 Copies.	0.60
04/03/07	8 Copies.	1.20
04/03/07	8 Copies.	1.20
04/03/07	156 Copies.	23.40
04/27/07	Photocopying Charges	1.65
		<hr/>
		\$30.60

Color Photocopying Charges

04/03/07	Color Photocopying Charges	3.00
		<hr/>
		\$3.00

Other Fees

02/07/07	Reversal From Void Check Number: 1032373 Bank Id: 992 Voucher Id: 1583946 Vendor: Dane County Clerk Of Court	(5.00)
02/07/07	Reversal From Void Check Number: 1032374 Bank Id: 992 Voucher Id: 1583947 Vendor: Dane County Clerk Of Court	(5.00)
		<hr/>
		(\$10.00)

Mailing Expense

03/06/07	Mailing Expense	1.17
03/12/07	Mailing Expense	0.39
03/15/07	Mailing Expense	0.39
03/30/07	Mailing Expense	0.39
04/03/07	Mailing Expense	2.31
04/03/07	Mailing Expense	2.31
04/03/07	Mailing Expense	0.39
04/03/07	Mailing Expense	2.31
04/27/07	Mailing Expense	0.39
		<hr/>
		\$10.05

Expenses Total:	\$33.65
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FOLEY & LARDNER LLP
VEREX PLAZA
150 EAST GILMAN STREET
MADISON, WI 53703-1481
TELEPHONE (608) 257-5035
FACSIMILE (608) 258-4258
WWW.FOLEY.COM

BELANGER, DEBORAH A.

Date: May 9, 2007
Invoice No.: 28035058
Our Ref. No.: 046238-0101

Remittance Advice

Outstanding Invoices:

12/9/2005 - 26109692	\$1,469.01
1/9/2006 - 26121130	\$14,967.16
2/22/2006 - 27003957	\$684.00
3/10/2006 - 27011404	\$4,417.81
4/12/2006 - 27023404	\$2,009.00
5/11/2006 - 27035072	\$1,500.07
6/22/2006 - 27050678	\$774.08
3/14/2007 - 28014211	\$3,973.93

<i>Prior Outstanding Balance</i>	<hr/> \$29,795.06
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Current Invoice:

05/09/2007 - 28035058	\$738.65
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Total Amount Due:	<hr/> \$30,533.71
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Should you wish to remit your payment via wire transfer,
please include our reference no. 046238-0101 and/or
invoice no. 28035058 and forward to:

U.S. Bank
Wire Transfer Dept.
777 E. Wisconsin Ave.
Milwaukee, WI 53202
ABA #075000022
ACCT #112031389
ACCT NAME: Foley & Lardner LLP

Harrison, Alena

From: Newmark, Jordan [newmark@cboe.com]
Sent: Wednesday, May 09, 2007 12:00 PM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Attachments: Response to OA for Pulse.doc; 1.131 Declaration for Pulse 1.doc; Exhibit 1 _ pulse charter.pdf; Exhibit 2 _ pulse emails.pdf



Response to OA for 1.131 Declaration
Pulse.doc (...)



for Pulse 1....



Exhibit 1 _ pulse
charter.pdf ...



Exhibit 2 _ pulse
emails.pdf (...)

Paul,

Attached are electronic copies of:

- (1) the Response (in Word);
- (2) the Rule 1.131 Declaration (in Word);
- (3) Exhibit 1 to the Declaration (.pdf); and
- (4) Exhibit 2 to the Declaration (.pdf).

Our scanners are currently offline; once they are running again, I will forward a scanned version of the executed declaration.

Regards,

Jordan

-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]
Sent: Thursday, April 12, 2007 9:17 AM
To: Newmark, Jordan
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

OK. Thanks for letting me know.

Paul
Paul S. Hunter
Foley & Lardner LLP
150 E. Gilman St.
Madison, WI 53703
Ph: 608-258-4292
Fx: 608-258-4258

-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]
Sent: Thursday, April 12, 2007 8:48 AM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

FYI - One of the inventors in the above-captioned application (Michael Hollerman) is on short-term leave and has not returned my messages. I am trying to get an authorization for his signature by proxy.

As a result, we may need to do a one-month extension. I will keep you posted.

Regards,

Jordan

-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]
Sent: Monday, April 09, 2007 9:10 AM
To: Newmark, Jordan
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Jordan,

Will do.

Paul
Paul S. Hunter
Foley & Lardner LLP
150 E. Gilman St.
Madison, WI 53703
Ph: 608-258-4292
Fx: 608-258-4258

-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]
Sent: Monday, April 09, 2007 9:03 AM
To: Hunter, Paul S.
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Paul,

I am in the process of having a 1.131 declaration signed by all of the inventors (one of which now resides in CA). As soon as I have the executed papers, I will touch base with you.

As an aside, in the future, please discuss reviewing materials and proposing responses with me prior to billing time for same. In this case, as the effective date of the cited referenced is so close to our filing date, a suggestion of investigating the possibility of a 1.131 declaration would have been much more appreciated that a proposed response directed to the merits of Examiner's argument.

Jordan

Jordan Newmark
Intellectual Property Counsel
Chicago Board Options Exchange
400 S. LaSalle Street
Chicago, IL 60605
(312) 786-7909
newmark@cboe.com
www.cboe.com

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-----Original Message-----

From: Hunter, Paul S. [mailto:PHunter@foley.com]
Sent: Monday, April 09, 2007 8:44 AM
To: Newmark, Jordan
Subject: RE: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Jordan,

This note is just a reminder that the 3 month deadline for responding to the office action mention in the email below is one week away. Please advise when we can expect to receive your draft.

Thank you,

Paul
Paul S. Hunter
Foley & Lardner LLP
150 E. Gilman St.
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-----Original Message-----

From: Newmark, Jordan [mailto:newmark@cboe.com]
Sent: Thursday, March 15, 2007 3:38 PM
To: Hunter, Paul S.
Subject: FW: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

Paul,

Please confirm receipt of my previously sent instructions included in the message below.

Regards,

Jordan

> -----Original Message-----

> From: Newmark, Jordan
> Sent: Wednesday, March 07, 2007 9:45 AM
> To: 'PHunter@foley.com'
> Subject: Your Ref. No.: 068550-0105 for U.S. Patent Application No. 09/912,709

>
> Paul,
>
> Pursuant to your correspondence dated February 7, 2007, I am writing to inform you that I will draft the response to the Office Action dated January 16, 2007 for the above-referenced case. I will provide the response to you by April 2, 2007 for filing.

> Please contact me with any questions.

> Regards,

> Jordan

> Jordan Newmark
> Intellectual Property Counsel
> Chicago Board Options Exchange
> 400 S. LaSalle Street

> Chicago, IL 60605
> (312) 786-7909
> newmark@cboe.com
> www.cboe.com

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